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A CONNECTION BETWEEN SCIENCE AND PRAYER

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Abstract

Chaos Spirituality links some current understandings of physics with time honored concepts relating to prayer. A four session class is presented in which the concepts of 1) sensitive dependence on initial conditions, 2) generalized genotype and generalized phenotype, 3) the uncertainty principle and 4) emergence are related to the methodology, expectations and results of prayer. The class participants reported that the basic information given concerning prayer was very useful, while the concepts from physics reinforced their understanding of prayer as well as deepen their sense of awe at the interconnectedness of creation.

A Synopsis of Chaos Spirituality

In a world that is full of change and that seems on the verge of plunging headlong into anarchy, people are grasping for a frame of reference that will help them cope with the transitions that are going on all around them. In Christianity, the spiritual discipline of prayer has been lifted up as of primary importance to lower anxiety and stress, increase one's faith, and strengthen one for service in the world.

However, in a high tech culture that demands that everything be useful and provide instantaneous results, a disciplined prayer life seems distant, inaccessible and irrelevant. Chaos Spirituality provides a context for understanding the importance and efficacy of prayer. This context is created by linking several fresh insights of the relatively new science of Chaos Theory with traditional understandings and expressions of Christian prayer.

When this link between Chaos Theory and prayer is made, some fundamental questions concerning prayer can be addressed in concrete ways. Questions such as, "Why should I pray?" "What does prayer do?" "Is prayer effective?" "What can I expect from prayer?" "Will prayer make a difference to me and my life?" can be addressed with the insights of Chaos Theory.

Finally, the practical application of Chaos Spirituality in the local setting is to facilitate the prayer life of the congregation. This is accomplished through developing programs which help individuals in the congregation discover new ways of looking at prayer. These fresh insights, in turn, help the congregation become a vital prayer center.

Ultimately, this prayer center of activity will become a locus for the workings of the Spirit of God.

Theological Framework

"Beginnings, Endings, and Fresh Starts"

"In the beginning when God created the heavens and the earth..." Thus begins the first chapter of Genesis. Thus begins the first chapter of Creation. And ever since the creation, all of creation has felt the need to be close to its Creator.

God, at many times and in many ways has reached out to humankind in order that all humanity might know the goodness of God. The garden of Eden, Noah, Abraham, Isaac, Jacob, Moses, the Judges, the Kings, the prophets and the poets have all been God's agents in telling the story of God's love.

Finally, in Jesus of Nazareth, God made the fullest self-revelation. As a result, the writer of the Gospel of John perceived the need to re-write the Genesis account, beginning the gospel with,

> In the beginning was the Word, and the Word was with God, and the Word was God. He was in the beginning with God. All things came into being through him, and without him not one thing came into being. What has come into being in him was life, and the life was the light of all people. (John 1:1-4)[1]

It is through Jesus that God not only makes God's self known, but also gives all of humanity the ability to fulfill its own need to know the creator. Paul writes that Jesus,

> ...is the image of the invisible God, the firstborn of all creation; for in him all things in heaven and on earth were created, things visible and invisible,

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[1] All biblical quotations, unless otherwise noted, are taken from the New Revised Standard Version, Division of Christian Education of the National Council of the Churches of Christ in the United States of America, 1989.

> whether thrones or dominions or rulers or powers--all things have been created through him and for him. He himself is before all things, and in him all things hold together... For in him all the fullness of God was pleased to dwell, and through him God was pleased to reconcile himself all things, whether on earth or in heaven, by making peace through the blood of his cross. (Colossians 1:15-17, 10-20)

It is important to notice that *all* have been reconciled to God through Christ. Christians have traditionally associated the beginning of tension between God and humanity as the point at which Adam and Eve sinned against God in the Garden of Eden. Because of this sin, the archetypal sin of self-reliance through knowledge, no one is able to enjoy the fullness of an intimate relationship with God.

> Therefore, just as sin came into the world through one man, and death came through sin, and so death spread to all because all have sinned... (Romans 5:12)

Paul writes concerning the relationship between the sin, or trespass, of Adam in the garden and the righteousness of Jesus on the cross. This righteousness through Christ on the cross Paul refers to as a "free gift."

> But the free gift is not like the trespass. For if the many died through the one man's trespass, much more surely have the grace of God and the free gift in the grace of the one man, Jesus Christ, abounded for the many. And the free gift is not like the effect of the one man's sin. For the judgment following one trespass brought condemnation, but the free gift following many trespasses brings justification. If, because of the one man's trespass, death exercised dominion through that one, much more surely will those who receive the abundance of grace and the free gift of righteousness exercise dominion in life through the one man, Jesus Christ. Therefore just as one man's trespass led to condemnation for all, so one man's act of righteousness leads to justification and life for all. For just as by the one man's disobedience the many were made sinners, so by the one man's obedience the many will be made righteous. (Romans 5:15-19)

Jesus, then, makes it possible for humanity to know God. How is this possible? How is it possible that one's thirst for God may be quenched in knowing Jesus? In the account of the last supper, Philip asked the same question.

> Philip said to [Jesus], "Lord, show us the Father, and we will be satisfied." Jesus said to him, "Have I been with you all this time, Philip, and you still do not know me? Whoever has seen me has seen the Father." (John 14:8-9)

This is the mystery of God in Christ. And yet, this is also the witness of the Holy Spirit. Later in the same account of the Gospel According to John, Jesus describes the Holy Spirit as a teacher, a guide, and a comforter. The Holy Spirit is that which instructs those who would know Jesus, and hence, God.

A Meaningful (*Relevant*) Church

The church is that body of believers in Jesus who have come to know God in Christ through the action of the Holy Spirit. It is the church that carries on the work of Christ in the world, viz., bringing persons into a meaningful relationship with God through Christ and the action of the Holy Spirit.

The church has always been involved with the ongoing struggle to bring Christ in meaningful ways to new generations of Christians. This struggle leads the church to discover new paradigms in the conception of theology, the interpretation of historical events, the study of Scripture, the experience of spirituality, and the implementation of polity.

Examples of these changes can be seen in the early theological debates of the ancient church, in which the spiritual constructs of the Hebraic culture were transformed to fit ideologies of Greek philosophy. The Hebrew concept of a Spirit (*ruach*) and a body (*nephesh*) which, in combination, made up the unity of human life (*adam*), was traded for a Greek matrix which included body (*soma*), spirit (*pneuma*), and an immortal soul (*psychos*). In the Greek system the soul was in a constant struggle between the whims of the material and evil body, and the desire to be close to God of the pure and good spirit. These different approaches did not change the fact of God's love for creation. Rather, these differing approaches to anthropology represent the shift in context from Hebraic to Hellenistic culture.

Other shifts are also visible as one traces the church through changing contexts. As the history of Christianity progressed through time, the church faced new challenges in relating persons to God. During the Reformation, Martin Luther struggled with the Roman Catholic Church to allow lay persons to participate materially in the sacraments of the church. In this way, Luther was able to help persons become related to God in Christ. John Calvin attempted to make spirituality more palpable by bringing God's rule on earth through theocracy. This was an attempt to make God relevant to the everyday lives of citizens.

Later, John Wesley brought a practical and functional dimension to spirituality through small groups of persons who were accountable to each other for their spiritual growth. Starting from a desire to know God, people were related to God in a meaningful way through these "holy clubs." Today in South America, Base Communities are

bringing alive the claims of Christ on the lives of their participants. This has taken on an urgency in their own context because of the harshness of the physical and political climate.

The Church in Chaos

In our own time, and in our own culture, a new movement of the Spirit is being felt, although it has not been clearly defined.

All around us, the world looks chaotic. There is a plague of violent crime infesting our cities. Gang warfare and the drug sub-culture causes us to be anxious about our future and about the future of those around us. There is a lack of peace in the world which adds to this anxiety. Genocide in Bosnia and Rwanda, infanticide in China and India, and nuclear threat from developing nations, such as North Korea and Pakistan, have all taken their toll on the spiritual well-being of society at large. The church has also suffered from these negative consequences. In the midst of these anxious times, a meaningful spiritual connection with the Creator is absolutely necessary. But how can we make that connection? How is it that we can make sense of what is going on around us? The relatively new science of Chaos may give us some hints.

Chaos is not new to scientists. In the past century, as scientists began to look at more and more minute pieces of matter and systems, chaos became more and more of a problem. Whether that chaos showed up as turbulence in fluids or in air or in some other closed system, it was, and is, a problem. Scientists would prefer to work with a world which is smooth, unblemished, and controlled, just like their laboratories. However, the world is full of turbulence — full of chaos.

In recent years, this turbulence in systems, this perennial problem of chaos, has become more of an ally than an enemy. Beginning with the studies of weather conducted

by Edward Lorenz in 1960, scientists have discovered that chaos is not an intruder, but is a normal part of every system. This realization has lead to the discovery that turbulence and chaos are not something to be fought, but rather, to be understood and exploited. And thus began what is now known as Chaos theory.[2]

Within the conceptual framework of Chaos theory are several ideas that can help one make sense of spirituality in the modern world. These motifs are the uncertainty principle, the Butterfly Effect, emergence, connectionism, generalized genotype and generalized phenotypes.

The "Uncertainty Principle"

Chaos theory recognized that chaos is not anarchy or the lack of order, but a kind of order masquerading as randomness.[3] Chaos is built into everything at a certain level. Because of this "randomness" that is built into every system, there is a sense in which one cannot say anything will happen with absolute certainty. For example, any chemistry student knows what happens when one mixes hydrogen and a match. Not only is there an impressive display of pyrotechnics, but water is also produced through the combining of hydrogen and oxygen. And although one can determine the quantities of hydrogen and oxygen will produce a certain amount of water, one could never predict which oxygen atoms will combine with which hydrogen atoms to form a particular molecule of H_2O.

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[2] Gleick, James, Chaos: Making A New Science (New York: Penguin Books, 1987), 11*ff.*

[3] Ibid, 22.

This makes predictions at the global level fairly accurate. However, at the local level (in this case, the atomic level), predictability is completely nonsensical. Hence the "uncertainty principle" of Chaos theory.

This randomness, this appearance of disorder and uncertainty, are present in the Biblical descriptions of the Holy Spirit. In describing the Spirit, Jesus uses the wind to indicate its unpredictable character.

> The wind blows where it chooses, and you hear the sound of it, but you do not know where it comes from or where it goes. (John 3:8)

This spiritual "uncertainty" principle is also hinted at in two other passages. These passages speak to the nature of God's priority in the working of the Spirit rather than the decision making processes of humanity. The first passage, from the Gospel According to John, talks about God's priority in the work of salvation.

> But to all who received him, who believed in his name, he gave power to become children of God, who were born, not of blood or of the will of the flesh or of the will of man, but of God. (John 1:13-14)

Just as a fetus cannot predict or control the conception of its own life or the moment of its own birth, neither can the children of God will their own births. It is the action of God.

The second passage, from 1 Corinthians, speaks of the Spirit's priority in administering the gifts of the Spirit necessary for the church to function. Comparing the church to a body, the Apostle Paul notes that there are many limbs but one body. There are many functions, but one purpose. However, the Spirit determines the function of each part, each individual, by the bestowing of specific spiritual gifts.

> Now there are varieties of [spiritual] gifts, but the same Spirit; and there are varieties of services, but the same Lord; and there are varieties of activities, but it is the same God who activate all of them in everyone. To each is given the manifestation of the Spirit for the common good...All

> these are activated by one and the same Spirit, who allots to each one individually just as the Spirit chooses. (1 Corinthians 12:4-7, 11)

Again, the Spirit is given priority in determining the distribution of Spiritual gifts. For the recipient, there is no certainty of determination. One cannot claim a certain gift. The spirit claims the individual and bestows the gift.

Chaos theory has forced scientists to face up to the fact that many aspects of systems are unpredictable and uncontrollable, no matter how carefully the researcher may measure and observe. At one time, it was felt that the entire universe could be understood by expanding the knowledge base about the smallest pieces of the structure. If one understood the pieces, one could understand the whole—or at least that is the way it was suppose to work. The truth of the matter is that when one looks at smaller and smaller pieces, one just finds smaller and smaller pieces. It seems that the downward limit to this spiral of measuring ever smaller bits of the puzzle is only limited by scientists ability to measure them.

Now scientists are looking in different directions to explain the workings of complex systems. At least they are looking at systems in different ways. Rather than looking for simplicity in systems at the smallest levels, scientists are looking at the whole complex mess. As M. Mitchell Waldrop says,

> Instead of ignoring everything that wasn't uniform and predictable, [systems theory] would have a place for individuality and the accidents of history. Instead of being about simplicity, it would be about—well, complexity."[4]

[4] Waldrop, M. Mitchell, Complexity: The Emerging Science at the Edge of Order and Chaos (New York: Simon & Schuster, 1992), 17.

Now scientists are looking at the whole, deriving function not from the parts, but how all of the parts function together.

The Butterfly Effect

Chaos theory also recognizes that all things are connected together. Seeming unrelated events can affect each other in significant ways. The scientific term for this is "sensitive dependence on initial conditions." This phenomena is known popularly as the "Butterfly Effect."[5]

"The Butterfly Effect" is a term that grew out of the study of weather in the 1960's. During this time, a researcher by the name of Edward Lorenz was working with a computerized model of weather to determine the possibility of predicting future weather patterns. The feeling at the time was that predicting weather was just like any other problem: once one had determined all of the variables involved with the equation, it was merely a matter of plugging in some values and coming up with the answer. In the case of weather, the variables would be air and ground temperatures, moisture content, prevailing winds and the like, and then building upon those known quantities in order to forecast tomorrow's conditions.

What Lorenz discovered is that it is impossible to make accurate enough measurements in order to predict with any amount of certainty what future conditions might exist The problem is that any variation at all in the original measurement can lead to significant variations in the final result. Scientists call this "sensitive dependence on initial conditions." Weather experts call it the "Butterfly Effect." It's the notion that a butterfly on the coast of Brazil flapping its wings today could cause a storm on the coast of Florida tomorrow. This notion is not new to English folklore:

For want of a nail, the shoe was lost;

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[5] Complexity, 23.

> For want of a shoe, the horse was lost;
> For want of a horse, the rider was lost;
> For want of a rider, the battle was lost;
> For want of a battle, the kingdom was lost!

Seemingly insignificant events can lead to very significant results. That is what the Butterfly Effect is all about. *Small things can have large results.*

Jesus said that small things can make a big difference in the end. He compared the Kingdom of God to mustard seeds and yeast.

> He put before them another parable: "The kingdom of heaven is like a mustard seed that someone took and sowed in his field; it is the smallest of all the seeds, but when it has grown it is the greatest of shrubs and becomes a tree, so that the birds of the air come and make nests in its branches." He told them another parable: "The kingdom of heaven is like yeast that a woman took and mixed in with three measures of flour until all of it was leavened." (Matthew 13:31-33)

Jesus expanded this to say that faith is the initial condition for great miracles to take place.

> For truly I tell you, if you have faith the size of a mustard seed, you will say to this mountain, 'Move from here to there,' and it will move; and nothing will be impossible for you." (Matthew 17:20)

What does a Christian community look like?

One of the difficult issues that faces the church in every generation is "What does a Christian look like?" In other words, given the circumstances which are inherent in any given culture, what constitutes a legitimate Christian behavior given the particularity of Jesus? Each new generation of Christian disciples face a new set of cultural criteria which becomes the backdrop of their spiritual lives. In the midst of this cultural milieu, a

Christian is mandated to act in a particularly and peculiarly Christian manner, and that behavior is not always clearly delineated in the Scriptures, and often has never been a part of Christian experience, thereby robbing the present generation of any precedent.

In the closing decade of the twentieth century, this tension between the particularity of Jesus and the contemporary culture has led to severe disagreements on several significant issues within the current expression of Christian behavior and ethics. Disagreements among varying viewpoints on abortion, gay rights, euthanasia, quality of life, as well as other issues, bring well intentioned Christian brothers and sisters to act in decidedly unchristian ways.

It is a wonder that those that profess, "one faith, one baptism, and one Lord of us all" can display such varying attitudes concerning the deepest issues of our times. At a juncture in history in which the culture at large seems to be hungry for spiritual things, the church finds itself unable to give any direction at all. As a result of taking a stand on every issue at every point on the spectrum, the church now stands for nothing at all. In a society that years for meaning, the church has doled away its significance issue by issue. The amazing result is that, having castrated ourselves with the knife of political significance, the church now wonders why it is impotent to reproduce, to make new Christians, through evangelism.

A major piece of reclaiming the public trust is reclaiming the purpose and significance, the mission and meaning, of the church. The difficulty with this, however, is that, appropriately enough for our time, this has become one of those issues in which well intentioned Christians have differing viewpoints. As one views the terrain of

modern Christianity, one can hear several factions within the church defending their particular viewpoint. Evangelism, service, spiritual mentoring, reformation of worship, Christian community and Biblical literacy are just a few of the remedies which are being thrust to the forefront of discussion as antidotes for the current crisis in American Christendom.

However, there is another way to discern what a Christian should look like. This model comes to us from the recent discoveries of scientists working in the fields of chaos theory and artificial intelligence.

> The study of artificial intelligence
>
> "is an effort to understand life by synthesis: putting simple pieces together to generate lifelike behavior in man-made systems. Its credo is that life is not a property of matter per se, but the organization of that matter."[6]

This science has led to two important insights. First, that life itself is not manifested within the matter of life, i.e., complex carbon based molecules. Rather, life is the result of the organization of matter. For example, a car is not merely a collection of oddly shaped pieces of metal, plastic, glass, rubber and other materials. It is an *organized* collection of oddly shaped pieces of metal, plastic, glass, rubber and other materials. A mechanical watch is not just a collection of cogs and springs inside a metal case. It is an *organized* collection of parts that, in tandem with one another, are able to become something that they cannot be when separate. The item that gives a mechanical process the ability to function is not a physical item at all. The ability to function comes from an abstract control structure that can be expressed without reference to the material from

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[6] Complexity, 277.

which the machine is made. As with mechanical processes, so with the processes of life. Life is not posited in the matter of life, but rather, the organization of that matter.

The second great insight is that living organisms are not organized in the same way as we are accustomed to thinking about mechanical processes. Most of the machines that we are familiar with have a "top down" organization. All of the constituent parts of the organization are made with a primary objective in mind. Automobiles have systems of acceleration, deceleration, weatherization, suspension, and comfort, all of which lend in some way to the primary objective which is safe, comfortable travel.

In opposition to this top down design, living systems are organized from the bottom up. Complex systems emerge from populations of simpler systems. Cells are made up of proteins, DNA, and other organelles. A brain is made up of complex bundles of neurons. The relatively simple actions of the constituent parts make possible the complex behavior of the whole.

And so it goes with other complex systems, whether they are biological systems or social systems. Economic and political systems exhibit the same kinds of unpredictable behavior one finds in living biological systems. Chris Langton, a leader in the field of artificial intelligence, has made the observation,

> "The most surprising lesson we have learned from simulating complex physical systems on computers is that complex behavior need not have complex roots. Indeed, tremendously interesting and beguilingly complex behavior can emerge from collections of extremely simple components."[7]

[7] Complexity, 279.

One of the most compelling observations of this kind of behavior in artificial intelligence is a computer model of the flocking behavior of birds. On September 22, 1987, Craig Reynolds of the Symbolics Corporation in Los Angeles presented a computer simulation to an artificial intelligence workshop at Los Alamos, Nevada. Reynolds computer simulation was an attempt to capture the essence of flocking behavior in birds, or the swarming behavior of bees, or the schooling behavior of fish.

Reynold's wrote a computer program that precisely imitated the kinds of behaviors observed in flocks of real birds. His birds, though, were blips on a computer screen, which he called "boids." The basic idea was to place a large group of autonomous, bird-like agents in an on-screen environment which was full of obstacles. The amazing part of the simulation was that Reynold's was able to model this behavior using only three simple, low level rules that each "boid" followed in relationship to neighboring "boids."

1. Each “boid” to maintain a minimum distance from other objects in the environment, including other "boids."
2. Each “boid” to match velocities with "boids" in its neighborhood.
3. Each “boid” tried to move toward the perceived center of mass of "boids" in its neighborhood.

The result was that the "boids" behaved just like a flock of birds would behave in real life. When the flock came to an obstacle in its path, it simply split apart, flew around the object, and came back together on the other side.[8]

These rules allowed the flock to adapt to changing conditions with a kind of organic complexity. When an obstruction was placed in its path, the flock would merely split apart and fly around it. This kind of adaptive behavior is virtually impossible with top down rules. In a top down organization, every possible situation must be accounted for by a separate rule which would tell each "boid" what it was to do in a given circumstance. Top down organization works well for single function systems like a watch or automobile, but not for complex adaptive systems which must account for the changing dynamics of a living universe.[9]

Generalized Genotype and Generalized Phenotype

To make this distinction between matter and function more apparent, artificial intelligence researchers have borrowed the language of biology. Biologists have made the distinction in living organisms between genotype and phenotype. In biology, genotype refers to the genetic blueprint which is encrypted in DNA. Phenotype refers to the structure that is created from those instructions. In the realm of artificial intelligence, generalized genotype, or GTYPE, is used to refer to any collection of low level rules.

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[8] Complexity, 242.

[9] For a full explanation of Chris Reynolds and his "boids," see Complexity, 241-243.

Generalized phenotype, or PTYPE, denotes the behavior that arises from the low level rules. [10] In Chris Reynold's "boids," the GTYPE is the three low level rules which are assigned to each "boid." The PTYPE is the behavior of the flock and its ability to adapt to the changing circumstances around it. In a computer, the GTYPE is the program and the PTYPE is what the program does with information given to it by the user.

The rules of GTYPE and their resulting PTYPE are universal in nature, and can be used to model the behaviors of economies, ecosystems, and national governments. However, there are some amazing consequences to all of this. On the one hand, it is impossible to start from a given set of GTYPE rules and predict what the PTYPE will be. Unless it is a very simple program, the only way to find out exactly how a computer model will behave is to run it. There is no other way to correctly predict how it will work. So it is with any other complex adaptive system. The only way to see how it will run is to let it fly.

On the other hand, it is impossible to generate a GTYPE given a desired PTYPE behavior. Although this is possible with computer programs which use precise algorithms and variables in well defined environments, it is impossible in the world of nature, in which the environment is constantly changing. The same is true of political, cultural, or economic systems in which the context of behavior is continually changing. The observable behavior of these complex systems is said to emerge from the basic, low-level rules that govern them. In other words, these exhibited characteristics are *emergent behavior*.

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[10] Complexity, 281.

Emergent Behavior

The discovery that complex behaviors are emergent from relatively simple rules has led to several profound insights about all complex systems. Moreover, these observations are true not only for those who experiment with artificial intelligence and artificial life, but in other systems as well.

First, complex systems always seem to emerge from the bottom up, from a population of much simpler systems.[11] The organization of complex systems flows from the bottom up. How do artificial life researchers simulate complex systems? Chris Langton of the Santa Fe Institute puts it this way,

> ...the way to achieve life like behavior is to simulate populations of simple units instead of one big complex unit. Use local control instead of global control. Let the behavior emerge from the bottom up, instead of being specified from the top down. And while you're at it, focus on ongoing behavior instead of the final result...living systems never really settle down.[12]

Second, in order to change the PTYPE, or behavior, of a system, one must change the GTYPE. This simple insight is the cornerstone of Ezra Earl Jones' Quest for Quality in the Church: A New Paradigm. In this book, Jones states that if one wishes to get a different result from a system, one has to redesign the system.

> The system is designed for the results it is getting. If you want different results, you will have to design the system.[13]

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[11] Complexity, 278.

[12] Complexity, 280.

[13] Jones, Ezra Earl, Quest for Quality in the Church: A New Paradigm (Nashville: Discipleship Resources, 1993), *vi*.

In the book Flight of the Buffalo, James Belasco and Ralph Stayer point out,

> The same old actions will get us the same old results. We need substantially different actions to get us substantially different results. A definition of insanity is: doing the same thing over and over and expecting a different result.[14]

Artificial Life and Spirit Life

Since these are considered to be universal rules of complex adaptive systems, one can apply them to the church, which can also be seen as a complex adaptive system. Several observations will be immediately evident when one considers the church in this regard.

First, the official organizational structures of the church must be seen as consequent rather than instrumental to the mission of the church. This is evident throughout the story of the early church as told in the book of Acts.

At first, the disciples were about a relatively simple number of tasks, all with one goal in mind, to do the will of God as revealed through Jesus. The original activity of the disciples after the ascension of Jesus was to *gather*[15] and to *pray*[16]. The gathering and prayer activity continued until the Holy Spirit moved some of the disciples to *speak.*[17] This, in turn, lead others to join the disciples, expanding the original system of 120

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[14] Belasco, James A. and Ralph C. Stayer, Flight of the Buffalo: Soaring To Excellence, Learning To Let Employees Lead (New York: Warner Books, 1993), 270.

[15] Acts 1:13; 2:1.

[16] Acts 1:14.

[17] Acts 2:5-13; 2:14-36; 3:12-26; 4:8-12; 4:31; 5:42.

disciples to more that 3,000 persons[18] who engaged in the gathering activities of baptizing, fellowship, learning and worship, and the activity of prayer.[19]

As the gathering and prayer intensified, the behavior of the community began to change. The individuals within the community began to care for one another in substantive material ways by sharing their possessions with one another.[20] Miracles also pervaded the context of the church.[21] Now, not only were the disciples gathering and praying, but they were also sharing and healing. The type and frequency of activity began to increase at this level until we come to the first major effort of the ancient church to reorganize itself into a more complex system.

Until the beginning of chapter six of Acts, the twelve[22] are the leaders, teachers and administrators of the fledgling Christian community. In chapter six the apostles become embroiled in a controversy of the care of the widows in the community. Certain non-native Jews, the Hellenists, were complaining that the Hellenist widows were being neglected in the daily distribution of food. The organizational tension in the community was great enough that the twelve, rather than taking control of the situation themselves, delegated the responsibility of goods distribution to seven other disciples who were given

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[18] Acts 2:41.

[19] Acts 2:42.

[20] Acts 2:44-45; 4:32-37.

[21] Actgs 2:43; 3:1-10; 5:12-16.

[22] The "Twelve" at this point in the narrative are "Peter, and John, and James, and Andrew, Philip and Thomas, Bartholomew and Matthew, James son of Alphaeus, and Simon the Zealot, and Judas son of James." (Acts 1:13b) These were joined by Matthias who was decided on by lots. (Acts 1:26)

charge of this task. The twelve then committed themselves fully to the tasks of praying and teaching.[23]

The importance of this moment cannot be underestimated in its importance for the development of the early church. Here is a major change in the way the church is organized so that it can continue the tasks that it is committed to accomplish. Tasks are also prioritized, so that the secondary tasks of communal living are shown to be outgrowths of the primary tasks of praying and teaching. In other words, a more complex organization has emerged from the primary tasks of its constituent parts.

Connectionism

A final major component of artificial life must be considered in relationship to the development of the church as a complex organization, and that is the aspect of connectedness of individuals in community. Researchers in artificial life regard life itself not as a property of matter per se, but the organization of that matter.[24] For artificial life, "life" is the system in which matter organizes itself. This concept is called *connectionism,* the idea of representing a population of interacting agents as a network of "nodes" linked by "connections." In this scheme the important component is the connection more so than the node, agent, or individual. Complex systems arise out of the myriad of connections made in the behaviors of individuals. M. Mitchell Waldrop says, "Somehow, by constantly seeking mutual accommodation and self-consistency, groups of

[23] Acts 6:2-4.
[24] Complexity, 277.

agents manage to transcend themselves and become something more."[25] This leads Waldrop to the conclusion that, "The power of any organized is not in the nodes/agents but in the connections."[26]

Jesus said that staying connected is important and that there is power in the connection.

> Again, truly I tell you, if two of you agree on earth about anything you ask, it will be done for you by my Father in heaven. For where two or three are gathered in my name, I am there among them. (Matthew 18:19-20)

The writer of Hebrews must have recognized this power when he admonished his congregation,

> And let us consider how to provoke one another to love and good deeds, not neglecting to meet together, as is the habit of some, but encouraging one another, and all the more as you see the Day approaching. (Hebrews 10:24-25)

In the early church described in the book of Acts, the community is constantly gathering.[27] The early church prayed, taught, worshipped and shared in community. The gathered community became a basic self-understanding of those first believers.

Conclusion

At the intersection of Christian spirituality and chaos theory is a framework for relating to our generation some of the basic tenets of the Christian Faith.

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[25] Complexity, 289.
[26] Complexity, 292.
[27] Acts 1:13, 15; 2:1, 42, 46; etc.

Although we know that God is love and the purpose of God is the reconciliation of all of creation to God through Jesus Christ, this may not always seem to be the case in any one person's individual circumstances. Globally, we are certain that God will prevail. Locally, we cannot predict what our experience of grace will be, or when it will arrive.

Great things can happen when people have even a little faith. For the ultimate results are dependent on one's faithfulness to the little things, not in pushing for a great amount of change or action. The wings of the Spirit produce winds that we may never know.

Great spirituality is emergent from simple prayer. Jesus prayed. The disciples prayed. The believers gathered in an upper room to pray. And when these persons prayed, great and unexpected events took place. The blind saw, the deaf heard, the hungry ate, the lame walked, unbelievers believed, and the church was born and sustained. Prayer is the PTYPE that gives rise to the GTYPE of the church.

And finally, when we gather together in the name of Jesus, we are different, more powerful and more able to accomplish the primary tasks of faith, than when we are separate. The connection between persons through the Spirit is the real power of the church.

Model of Ministry

Goals

The original focus of my energies in regard to the practical application of chaos spirituality was to design a series of classes relating some of the metaphors of chaos theory to traditional categories of Christian spirituality. I felt that these metaphors would lend themselves to making certain concepts of spirituality more accessible to modern (postmodern) minds. Certain aspects of chaos theory correlate very well to Christian spirituality, and also have the ability to draw on one's sense of wonder at seeing glimpses of how the universe is constructed.

My original inclination was to develop the class along my preconceived ideas of what is important in Christian prayer. However, while in discussion with my context associates, it became clear that this was not the best route to take. Rather than presenting what was interesting and vital for me, the context associates asked that I provide a forum for finding out what the congregation's needs were in the area of prayer.

After further discussion, it was decided that the best path for discovering the needs of the congregation would be through focus groups. Three of my context associates have considerable skills and experience with focus groups and agreed to be a part of designing and implementing the groups.

Consultation Process

Over the course of several meetings with the context associates, a design for the focus groups became apparent. One context associate pointed out that by using the focus groups, I could be certain to address the issues of most importance to the congregation. Another context associate added that, although I would be able to assess the perceived needs of the congregation in regard to prayer, I should not overlook the fact that these may not be the only issues of concern. That, in fact, some deeper issues of spirituality may be underlying the needs expressed in the focus groups. It was pointed out that there are sometimes large gaps between perceived needs and unknown opportunities, and these unknown opportunities often provide the greatest arena for growth and development. This relationship was made evident using the following diagram.[28]

[28] Steve Schlagel, interview by author, 18 August 1994, Montgomery, Ohio.

This same context associate suggested that once I had the results of the focus groups, I should not hesitate to take the prayer classes and programs in a direction which would expand the congregation's awareness, knowledge and pursuit of spirituality, rather than confining the program to the needs expressed in those sessions.

Finally, a third context associate, also a marketing expert, volunteered to construct a focus group outline to be used in our survey. She was very excited about the opportunity to lead the focus groups, since this was an area of her life that she wanted to work on as well. We discussed the possible issues involved with prayer that could be addressed in the focus groups. These questions included the habits that people have formed around prayer, the attitudes that people have toward prayer, and the satisfaction level of persons concerning their prayer lives. She developed the following outline to generate discussion in the focus groups:

Prayer Focus Group Discussion Outline[29]

I. Warm up

A. How many have participated in a focus group before?

1. Purpose is to learn from a group of people what their opinions are on a certain topic.

2. No right or wrong.

[29] Hope Felton-Miller, interview by author, 27 September 1994, Montgomery, Ohio.

3. It's important to say what you think even if someone else has already said it.

4. Say "I agree" or, if you don't, say that too and let us know what you do believe.

B. We are videotaping.

1. So don't have to take notes.

C. Subject tonight is prayer.

1. The purpose is to understand something about where folks at Church of the Saviour are with regard to prayer.

2. It's important to the purpose that you be candid as possible and that you feel free to give your own point of view, even if it is different from others'.

3. This is, of course, a personal topic so there may be times when you prefer not to share some feeling with the group. All you have to say is "pass" and we will respect that.

D. Ice breaker.

1. Each introduce self, tell us something about your family, and you earliest memory of praying.

II. Habits.

A. When was the most time that you remember praying?

B. How many times in the last week do you remember praying?

C. Do you pray most frequently alone or with others?

1. If with others, who?

D. For parents: Is it a habit to pray with your kids?

E. For married people: Is it a habit to pray with your spouse?

F. Do you usually pray "standard" prayers or ad lib?

G. Do you have a "schedule" of prayer times when you pray regularly, or is it more "impromptu?" What prompts the "impromptu" prayers?

H. Where do you pray most frequently?

I. When you pray, how long do you typically spend in prayer?

III. Attitudes (Probe as appropriate)

A. When was a time in your life when you prayed most frequently?

B. Do you have a favorite prayer?

1. If so, what is it?

C. Are you comfort when asked to offer a prayer for a group?

D. What do you think is the greatest benefit to you yourself of prayer?

E. Has your need for prayer changed over time?

IV. Satisfaction

A. Why do you pray?

1. Group exercise with chart pad

B. On a scale of 1 to 10, how satisfied are you with you prayer life?

1. Secret ballot

C. What's the best part of your prayer life, the aspect that gives you the most satisfaction?

1. Why?

D. For you yourself, what is the one thing that would most increase the satisfaction that you derive from your prayer life?

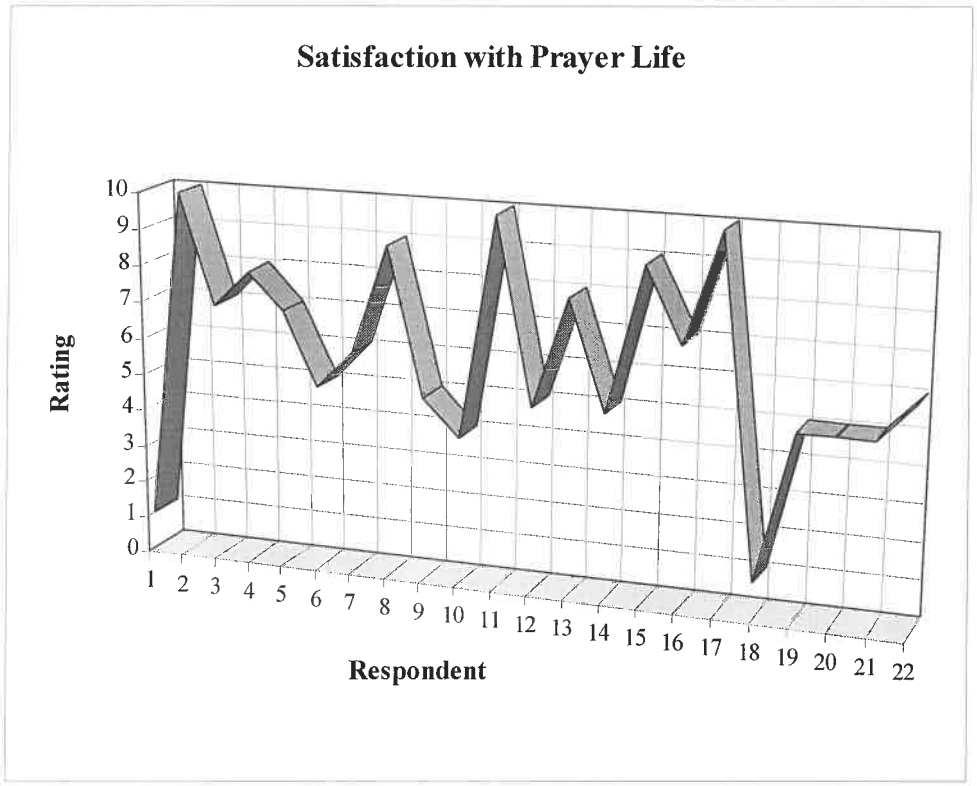
The next step in the focus group process was to set dates for the focus groups and recruit volunteers. I chose Wednesday evenings for the focus groups. In September, 1994, Church of the Saviour began a Wednesday evening program called "COS Night." COS Night coincided with the choir rehearsal schedule which was already in place. It expanded the music schedule to include dinner, adult education opportunities, a study room, a craft room and a nursery. This program met with good success, and this seemed like the best opportunity to get some volunteers together. The actual meetings were held on consecutive Wednesday nights, October 19 and 26, 1994 from 6 to 8 p.m.

The volunteers were picked on two criteria. The context associates suggested that I attempt to gain a wide variety of demographic representation. For this reason, I selected the following categories: 1) marital status (single and married), and 2) generational status (youth, boomers, busters, empty-nesters and retired persons.) These categories met the approval of the context associates, so I began recruiting. All of the above categories were represented in at least one of the three focus groups. Each focus group consisted of 7-8 persons. The groups were actually led by two of the context associates who had extensive experience in leading focus groups. The context associates also felt that this

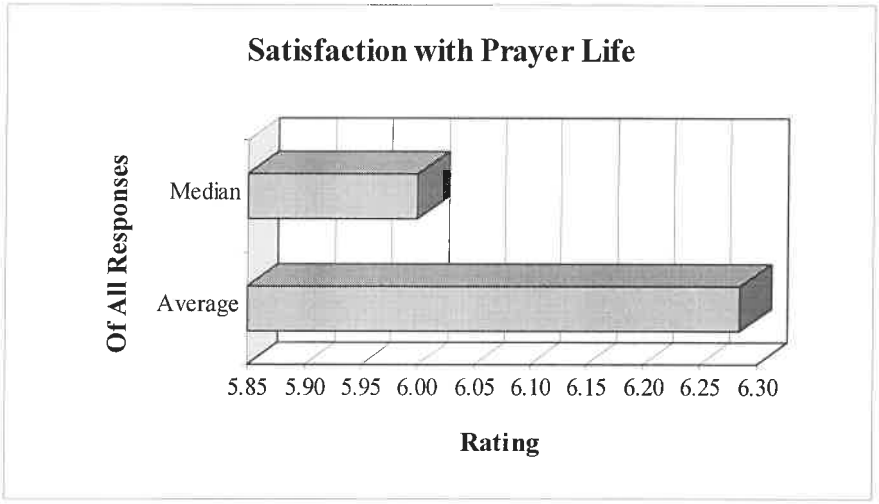
would be less intimidating for the volunteers since they would not be under pressure to provide what they felt the pastor wanted to hear. Each of the three focus groups were either video taped or recorded on cassette so that I could review the material in detail after the sessions were over.

The results of the focus groups were very revealing. Although there was a wide range of experience and habit in relationship to prayer, there was also a great consensus that each person would like to increase their experience and understanding. The range of personal prayer was extreme. For some it was not a usual practice. For others, prayer was a constant conversation throughout the day.

Personal satisfaction in relationship to prayer also had a wide range of response. Some felt no satisfaction in their prayer lives. Others were very satisfied. In a secret ballot concerning prayer, group members were asked to rate their personal satisfaction with their prayer lives.



The participants were to rate their satisfaction on a scale of one through ten, with one corresponding to "no satisfaction" and ten corresponding to "very satisfied." Numbers from 1 to ten were represented. The average of all respondents was 6.27 with a median of 6. It seems safe to assume that, on average, respondents were somewhat satisfied with their prayer lives, but saw quite a bit of room for improvement.



The issues of greatest importance for the focus groups were 1) methodology, 2) expectations, and 3) discomfort in praying in front of others. The questions raised in terms of methodology included, "Am I praying the right way?" "How can I teach my children to pray?" and "Are my prayers acceptable?" Several questions were related in terms of expectation, such as "How does God answer prayer?" "Does God always answer prayer?" "What are the benefits of prayer?" and "What are the effects of prayer?" Finally, in relationship to discomfort in praying in public, questions were raised concerning, "What is the correct way to pray in public?" "How can I gain more experience praying in front of others?" "How can I approach my spouse and children about praying at home?" and "Should I pray in restaurants?"

The Class Design

On the basis of questions revealed in the focus group meetings, I decided to design a four part class with four particular metaphors from Chaos Theory. Each class

would address, either directly or indirectly, the questions raised by the focus groups. The four metaphors I chose were 1) the Sensitive Dependence on Initial Conditions, also known as the Butterfly Effect, 2) generalized genotype and generalized phenotype, also known as GType and PType, 3) the uncertainty principle, and 4) emergence.

It was suggested by the context associates that this program should be worked into the Wednesday evening COS night program. The four Wednesday evenings were January 11, 18, 25 and February 1, 1995. This limited the duration of each class period to 45 minutes, coinciding with the music rehearsal schedule. Although these sessions seemed short to me, the participants felt that they worked well. There was enough time for learning basic concepts, while keeping everyone wanting more at the end of the class. This seemed to heighten the participants sense of expectation for the next class, which kept participation high. Each class session was attended by 19 to 25 persons.

Each class began with the "Term for the Day," in which I gave the title of a concept of Chaos Theory, an explanation of that term, and then related that term to the tradition of the scriptures. Then the class was given the opportunity to discuss the concept in relation to their own experience of prayer. Finally, the class was given handouts which contained an outline of the information given in the class, as well as some direction as to where participants could look for more information on subjects which had peaked their interest. The following outlines were actually used in the class.

The Class Outline

I. General Class Outline

A. Basic Structure

1. Term for the Day

2. Relationship to the Scriptures

3. Discussion Questions

4. Where to Find More Information

5. Prayer

II. Class #1: January 11, 1995

A. Overview

1. Expectations for the class

a. Discussion question for the class

1) What do you hope to learn during our class time?

(Write answers on blackboard or flip chart)

B. Introduction

1. Over the next four weeks we will have the opportunity to learn more about prayer

2. We will be using some new insights from science

a. These insights come from Chaos Theory

1) Chaos Theory is a new way of looking at the universe which attempts to account for the

many unpredictable incidents that we find in the universe

2) Chaos Theory is new because it is dependent upon computer technologies which makes it possible to complete the complex calculations needed to model the theory

3. It is my belief that these new theories can provide for us a more profound understanding of prayer

a. Each week, we will look at one concept of Chaos Theory and how that term relates to prayer

b. Finally, we will look at how we can use this concept to enhance our own prayer lives

C. Term for the Day: The Butterfly Effect

1. "The Butterfly Effect" is a term that grew out of the study of weather in the 1960's. During this time, a researcher by the name of Edward Lorenz was working with a computerized model of weather to determine the possibility of predicting future weather patterns. The feeling at the time was that predicting weather was just like any other problem: once one had determined all of the variables involved with the equation, it was merely a matter of plugging in some values and coming up with the answer.

In the case of weather, the variables would be air and ground temperatures, moisture content, prevailing winds and the like, and then building upon those known quantities in order to forecast tomorrow's conditions.

What Lorenz discovered is that it is impossible to make accurate enough measurements in order to predict with any amount of certainty what future conditions might exist The problem is that any variation at all in the original measurement can lead to significant variations in the final result. Scientists call this "sensitive dependence on initial conditions." Weather experts call it the "Butterfly Effect." It's the notion that a butterfly on the coast of Brazil flapping its wings today could cause a storm on the coast of Florida tomorrow. This notion is not new to English folklore:

> For want of a nail, the shoe was lost;
>
> For want of a shoe, the horse was lost;
>
> For want of a horse, the rider was lost;
>
> For want of a rider, the battle was lost;
>
> For want of a battle, the kingdom was lost!

Seemingly insignificant events can lead to very significant results. That is what the Butterfly Effect is all about. *Small things can have large results*.

D. The Butterfly Effect and the Bible

1. Faith is like mustard seed and yeast

a. Matthew 13:31-34

He put before them another parable: "The kingdom of heaven is like a mustard seed that someone took and sowed in his field; it is the smallest of all the seeds, but when it has grown it is the greatest of shrubs and becomes a tree, so that the birds of the air come and make nests in its branches." He told them another parable: "The kingdom of heaven is like yeast that a woman took and mixed in with three measures of flour until all of it was leavened." Jesus told the crowds all these things in parables; without a parable he told them nothing.

2. Faith is Like a Mustard Seed: It only takes a little to have a large effect

a. Matthew 17:14-20

When they came to the crowd, a man came to him, knelt before him, and said, "Lord, have mercy on

my son, for he is an epileptic and he suffers terribly; he often falls into the fire and often into the water. And I brought him to your disciples, but they could not cure him." Jesus answered, "You faithless and perverse generation, how much longer must I be with you? How much longer must I put up with you? Bring him here to me." And Jesus rebuked the demon, and it came out of him, and the boy was cured instantly. Then the disciples came to Jesus privately and said, "Why could we not cast it out?" He said to them, "Because of your little faith. For truly I tell you, if you have faith the size of a mustard seed, you will say to this mountain, 'Move from here to there,' and it will move; and nothing will be impossible for you."

b. Mark 4:30-34

He also said, "With what can we compare the kingdom of God, or what parable will we use for it? It is like a mustard seed, which, when sown upon the ground, is the smallest of all the seeds on earth; yet when it is sown it grows up and becomes the greatest of all shrubs, and puts forth large branches,

so that the birds of the air can make nests in its shade." With many such parables he spoke the word to them, as they were able to hear it; he did not speak to them except in parables, but he explained everything in private to his disciples.

c. Luke 13:18-21

He said therefore, "What is the kingdom of God like? And to what should I compare it? It is like a mustard seed that someone took and sowed in the garden; it grew and became a tree, and the birds of the air made nests in its branches." And again he said, "To what should I compare the kingdom of God? It is like yeast that a woman took and mixed in with three measures of flour until all of it was leavened."

d. Luke 17:5-6

The apostles said to the Lord, "Increase our faith!" The Lord replied, "If you had faith the size of a mustard seed, you could say to this mulberry tree, 'Be uprooted and planted in the sea,' and it would obey you.

3. Evil, just as good, can start small and get out of hand.

a. Matthew 16:11-12

How could you fail to perceive that I was not speaking about bread? Beware of the yeast of the Pharisees and Sadducees!" Then they understood that he had not told them to beware of the yeast of bread, but of the teaching of the Pharisees and Sadducees.

b. Mark 8:14-21

Now the disciples had forgotten to bring any bread; and they had only one loaf with them in the boat. And he cautioned them, saying, "Watch out -- beware of the yeast of the Pharisees and the yeast of Herod." They said to one another, "It is because we have no bread." And becoming aware of it, Jesus said to them, "Why are you talking about having no bread? Do you still not perceive or understand? Are your hearts hardened? Do you have eyes, and fail to see? Do you have ears, and fail to hear? And do you not remember? When I broke the five loaves for the five thousand, how many baskets full of broken pieces did you collect?" They said to him, "Twelve." "And the seven for the four thousand,

how many baskets full of broken pieces did you collect?" And they said to him, "Seven." Then he said to them, "Do you not yet understand?"

c. Luke 12:1

Meanwhile, when the crowd gathered by the thousands, so that they trampled on one another, he began to speak first to his disciples, "Beware of the yeast of the Pharisees, that is, their hypocrisy.

c. Luke 13:20-21

And again he said, "To what should I compare the kingdom of God? It is like yeast that a woman took and mixed in with three measures of flour until all of it was leavened."

d. 1 Corinthians 5:6-8

Your boasting is not a good thing. Do you not know that a little yeast leavens the whole batch of dough? Clean out the old yeast so that you may be a new batch, as you really are unleavened. For our paschal lamb, Christ, has been sacrificed. Therefore, let us celebrate the festival, not with the old yeast, the yeast of malice and evil, but with the unleavened bread of sincerity and truth.

e. Galatians 5:4-10

You who want to be justified by the law have cut yourselves off from Christ; you have fallen away from grace. For through the Spirit, by faith, we eagerly wait for the hope of righteousness. For in Christ Jesus neither circumcision nor uncircumcision counts for anything; the only thing that counts is faith working through love. You were running well; who prevented you from obeying the truth? Such persuasion does not come from the one who calls you. A little yeast leavens the whole batch of dough. I am confident about you in the Lord that you will not think otherwise. But whoever it is that is confusing you will pay the penalty.

4. Old Testament

a. 1 Kings 19:9-13

At that place he came to a cave, and spent the night there. Then the word of the LORD came to him, saying, "What are you doing here, Elijah?" He answered, "I have been very zealous for the LORD, the God of hosts; for the Israelites have forsaken your covenant, thrown down your altars, and killed

your prophets with the sword. I alone am left, and they are seeking my life, to take it away." He said, "Go out and stand on the mountain before the LORD, for the LORD is about to pass by." Now there was a great wind, so strong that it was splitting mountains and breaking rocks in pieces before the LORD, but the LORD was not in the wind; and after the wind an earthquake, but the LORD was not in the earthquake; and after the earthquake a fire, but the LORD was not in the fire; and after the fire a sound of sheer silence. When Elijah heard it, he wrapped his face in his mantle and went out and stood at the entrance of the cave. Then there came a voice to him that said, "What are you doing here, Elijah?"

D. Discussion Questions

1. Have you ever experienced that small things can lead to large results in your own life? What was the experience? How have you come to interpret this experience in relationship to your faith?

2. How can our prayer lives reflect the idea that small things can have a large effect? How would this affect the way in which you pray?

E. Where to go for more information:

1. Gleick, James. Chaos: Making a New Science. New York: Penguin Books, 1987.

F. Assignment for next week

1. This week we're going to act out the belief that great things can begin with small actions. We will demonstrate this by using the Lord's Prayer as our prayer for the week. It is a prayer that everyone knows, yet not everyone prays on a regular basis (with the exception of worship).

2. Pray the Lord's Pray for 5 minutes each day. You may pray quickly or slowly, out loud or to yourself. Use the time to repeat the words of the Lord's Prayer in a way that is meaningful to you. We'll share our experiences together next week.

G. End Class with prayer

1. Part of the purpose of the class is to give the participants the opportunity to pray in an open and accepting environment. Prayer requests should be shared, and then each participant should be given the opportunity to pray in rotation around the class circle.

III. Class #2: January 18, 1995

A. Review from week one

1. Last week we talked about the Butterfly Effect: *Small things can have large results.* To experience this in our prayer lives, we were to pray the Lord's Prayer each day. What affect did this have? Did you enjoy this exercise in prayer? Why? Was this helpful or harmful or irrelevant? Did your experience change through the week? What struck you as you as being important during your prayer time? Would you suggest this possibility of prayer to a friend in spiritual need? Will you continue this practice as a part of your own prayer life?

B. Term for the Day: GType and Ptype

How would you describe the behavior of a flock of birds? More than this, how would you develop a group of rules for the individual birds that would organize them into a flock? Remember, they have to be able to fly together, fly around obstacles in their path, land in order, take off in order, nest together and all of the other things that flocks of birds do.

Sounds impossible, doesn't it? In fact, it is impossible when looked at from the perspective of the "flock." When one considers all of the possible configurations and experiences a flock

may go through, it would be impossible to design a system that takes into account every nuance of reality. A system that is designed in this manner is called "top down design." Another way to understand top down design is any system or group organized with the end result in mind. For our flock of birds, this would mean the system would have to be designed with every possible scenario having been considered in advance, so that when the flock came upon that particular circumstance, it could deal with the situation. Of course, this is an impossible task, because in real life, flocks of birds are confronted with an infinite combination of circumstances. Top down organization is only possible when all of the variables can be accounted for.

Then how do flocks organize themselves? What principles do they use?

This is the question that Craig Reynolds, a researcher in artificial life, asked himself as he began to write a computer program to do just that. What Reynolds discovered is that it only takes a few rules to make birds act like a flock. And that is the "trick." One has to look at the behavior of the birds, not the flock.

When complex structures are organized from the level of the individual, it is called "bottom-up organization." Reynolds discovered that he needed only three rules to make his artificial

flock behave like a real-life flock. Each bird followed these three simple rules of behavior:

1. It tried to maintain a minimum distance from other objects in the environment, including other birds.
2. It tried to match the speed of its neighbors.
3. It tried to move towards the center of the flock.

The terms used to name these low level rules and the behavior that resulted from them were borrowed from biology. When studying living organisms, biologists make a distinction between its genotype and phenotype. The organism's genotype is its genetic blueprint encoded in the structure of its DNA. The organism's phenotype is the structure that is created by the DNA, or genotype.

In the same way, our bird's rules for flying become its generalized genotype, or GTYPE. The behavior exhibited by many birds flying together, the flock, is the generalized phenotype, or PTYPE. Every complex organization can be described in terms of the rules of organization and the resulting behavior. As a result, every complex organization has a GTYPE and a PTYPE.

The church is also a complex organizational structure with rules that guide its behavior. Very often we think of the church as a result of "top-down" organization— someone has handed down

how things ought to be run. But what if exactly the opposite is true? What if the church's action in the world and its organizational patterns are really the result of "bottom-up" organization? What if church systems are the result of form following function? In that case, we would need to decide what the important actions of individual Christians are in order to see what the church should look like. What would be the low level rules that each individual Christian could live by which would result in the organization that we call the church? What is the GTYPE of the church, the rules that Christians live by? What is the PTYPE of Christianity (overall structure based on the activity of the individuals)?

B. Relationship to the Scriptures

1. The Greatest Commandment

Matthew 22:34-40 (Mark 12:28-31; Luke 10:25-28)

> When the Pharisees heard that he had silenced the Sadducees, they gathered together, and one of them, a lawyer, asked him a question to test him. "Teacher, which commandment in the law is the greatest?" He said to him, " 'You shall love the Lord your God with all your heart, and with all your soul, and with all your mind.' This is the greatest

and first commandment. And a second is like it: 'You shall love your neighbor as yourself.' On these two commandments hang all the law and the prophets."

2. A New Commandment (maundatum novum)

John 13:34-35

I give you a new commandment, that you love one another. Just as I have loved you, you also should love one another. By this everyone will know that you are my disciples, if you have love for one another."

3. The Golden Rule

Matthew 7:12 (Luke 6:31)

"In everything do to others as you would have them do to you; for this is the law and the prophets.

Romans 13:8-10

Owe no one anything, except to love one another; for the one who loves another has fulfilled the law. The commandments, "You shall not commit adultery; You shall not murder; You shall not steal; You shall not covet"; and any other commandment, are summed up in this word, "Love your neighbor

as yourself." Love does no wrong to a neighbor; therefore, love is the fulfilling of the law.

Galatians 5:13-14

For you were called to freedom, brothers and sisters; only do not use your freedom as an opportunity for self-indulgence, but through love become slaves to one another. For the whole law is summed up in a single commandment, "You shall love your neighbor as yourself."

4. Sermon on the Mount Matthew 5-7

5. Sermon on the Plain Luke 6:17-49

C. Discussion Questions

1. What do you think is/are the most important rule/rules for Christian living? Why?

2. What would your church look like if it were organized according to those principles?

3. If you could change one thing about your life today because of these principles, what would it be? Why? What difference would it make in your life? What difference would it make in the way that you treat others?

D. Where to Find More Information

1. Waldrop, M. Mitchell. Complexity: The Emerging Science at the Edge of Order and Chaos. New York: Simon and Schuster (Touchstone Books), 1992.

2. Hauerwas, Stanley and William H. Willimon. Resident Aliens: Life in the Christian Colony. Nashville: Abingdon Press, 1988.

3. Watson, David Lowes. The Early Methodist Class Meeting: Its Origins and Significance. Nashville: Discipleship Resources, 1987.

E. Assignment

1. This week we will act out the assumption that the principles by which we live will not only affect our lives, but also the lives around us. Our pray for this week will be:

Dear God, you have asked me to be a lover of other persons. Show me someone to love this day. Amen.

F. Prayer

1. Our closing prayer for this week will be intercessory. Intercessory prayer is any prayer said on the behalf of another. Anytime we intercede for another person or situation before God, we are involved with intercessory prayer.

2. Make a list of persons and situations that you feel led to prayer for. Include these in your daily prayer. Include these in the closing prayer of the class.

IV. Class #3: January 25, 1995

A. Term for the Day: The Uncertainty Principle

Chaos theory recognized that chaos is not anarchy or the lack of order, but a kind of order masquerading as randomness. Chaos is built into everything at a certain level. Because of this "randomness" that is built into every system, one cannot say anything will happen with absolute certainty. For example, any chemistry student knows what happens when one mixes oxygen and hydrogen and energy, say, in the form of a lit match. Not only is the an impressive display of pyrotechnics, but there is the production of water. Although one can say that the combination of hydrogen and oxygen produces water, one could never predict which oxygen atoms will combine with which hydrogen atoms to form the compound. This makes predictions at the global level fairly accurate. However, at the local level (in this case, the atomic level), predictability is completely nonsensical. Hence the "uncertainty principle" of Chaos theory.

Chaos theory has forced scientists to face up to the fact that many aspects of systems are unpredictable and uncontrollable, no matter how careful the researcher may be. At one time, it was felt that the entire universe could be understood with more knowledge about the smallest pieces of the structure. If one understood the pieces, one could understand the whole—or at least that is the way it was suppose to work. The truth of the matter is that when one

looks at smaller and smaller pieces, one just finds smaller and smaller pieces. It seems that the downward limit to this spiral of measuring ever smaller bits of the puzzle is only limited by scientists ability to measure them.

Now scientists are looking in different places for what explains systems. Well, at least they are looking at systems in different ways. Rather than looking for simplicity in systems at the smallest levels, scientists are looking at the whole complex mess. As M. Mitchell Waldrop says,

> Instead of ignoring everything that wasn't uniform and predictable, [systems theory] would have a place for individuality and the accidents of history. Instead of being about simplicity, it would be about—well, complexity."[30]

Now we look at the whole, and derive function not from the parts, but how all of the parts function together.

B. Relationship to the Scriptures

John 3:8

This randomness, appearance of disorder and uncertainty are present in the Biblical descriptions of the Holy Spirit. In describing the Spirit, Jesus uses the wind to indicate its unpredictable character.

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[30] Waldrop, M. Mitchell, Complexity: The Emerging Science at the Edge of Order and Chaos (New York: Simon & Schuster, 1992), 17.

> The wind blows where it chooses, and you hear the sound of it, but you do not know where it comes from or where it goes. (John 3:8)

John 1:13-14

> But to all who received him, who believed in his name, he gave power to become children of God, who were born, not of blood or of the will of the flesh or of the will of man, but of God. (John 1:13-14)

> Just as a fetus cannot predict or control the conception of its own life or the moment of its own birth, neither can the children of God will their own births. It is the action of God.

1 Corinthians 12:4-7, 11

> Now there are varieties of [spiritual] gifts, but the same Spirit; and there are varieties of services, but the same Lord; and there are varieties of activities, but it is the same God who activate all of them in everyone. To each is given the manifestation of the Spirit for the common good...All these are activated by one and the same Spirit, who allots to each one

individually just as the Spirit chooses. (1 Corinthians 12:4-7, 11)

This passage speaks of the Spirit's priority in administering the gifts of the Spirit necessary for the church to function. Comparing the church to a body, the Apostle Paul notes that there are many limbs but one body. There are many functions, but one purpose. However, the Spirit determines the function of each part, each individual, by the bestowing of specific spiritual gifts. It is the Spirit which is given priority in determining the distribution of Spiritual gifts. For the recipient, there is no certainty of determination.

C. Discussion Questions

Have you ever experienced the feeling of being certain of God's love, and yet at the same time feeling anxious about a specific situation? What was the situation? How did you know God's concern and love? Was the situation resolved? How was the situation resolved? Did you experience God's peace? How can you experience God's peace even though you are anxious about a particular situation, event or person in your life?

D. Where to Find More Information

1. Waldrop, M. Mitchell. Complexity: The Emerging Science at the Edge of Order and Chaos. New York: Simon and Schuster, 1992

2. Poloma, Margaret M. and George H. Gallup, Jr. Varieties of Prayer: A Survey Report. Philadelphia: Trinity Press International, 1991.

3. Dossey, Larry. Healing Words: The Power of Prayer and the Practice of Medicine. San Francisco: Harper Collins Publishers, 1993.

E. Assignment: This week we will experiment with two models of prayer. On model is based on the Lord's Prayer, the other on the acronym of ACTS.

1. The Lord's Prayer

Our Father, who art in heaven,
hallowed by thy name.
Thy kingdom come,
thy will be done on earth as it is in heaven.
Give us this day our daily bread.
And forgive us our trespasses,
as we forgive those who trespass against us.
And lead us not into temptation,
but deliver us from evil.
For thine is the kingdom, and the power, and the glory, forever. Amen.

2. ACTS Method

Adoration
Praising God for who God is
Confession
Admitting to God and ourselves who we are
Thanksgiving
Gratitude for all of the gifts of God

Supplication

Praying for God's will

F. Prayer

Today's class session will end with the participants repeating the Lord's Prayer three times aloud.

V. Class #4: February 1, 1995

A. Term for the Day: Emergence

The study of artificial intelligence

> "is an effort to understand life by synthesis: putting simple pieces together to generate lifelike behavior in man-made systems. Its credo is that life is not a property of matter per se, but the organization of that matter."[31]

This science has led to two important insights. First, that life itself is not manifested within the matter of life, i.e., complex carbon based molecules. Rather, life is the result of the organization of matter. A car is not merely a collection of oddly shaped pieces of metal, plastic, glass, rubber and other materials. It is an organized collection of oddly shaped pieces of metal, plastic, glass, rubber and other materials. A mechanical watch is not just a collection of cogs and springs inside a metal case. It is an organized collection of parts that, in tandem with one another, are able to become something that they cannot be when separate. The item that gives a mechanical process the ability to function is not a physical item

[31] Complexity, 277.

at all. The ability to function comes from an abstract control structure that can be expressed without reference to the material that machine is made. As with mechanical processes, so with the processes of life. Life is not posited in the matter of life, but rather, the organization of that matter.

The second great insight is that living organisms are not organized in the same way as we are accustomed to thinking about mechanical processes. Most of the machines that we are familiar with have a "top down" organization. All of the constituent parts of the organization are made with a primary objective in mind. Automobiles have systems of acceleration, deceleration, weatherization, suspension, and comfort, all of which lend in some way to the primary objective: safe, comfortable travel.

Living systems are organized from the bottom up. Complex systems emerge from populations of simpler systems. Cells are made up of proteins, DNA, and other organelles. A brain is made up of neurons. And so it goes with other complex systems that exhibit the kinds of unpredictable behavior one finds in living systems, such as an economy, which is made up of firms and individuals. Chris Langton, a leader in the field of artificial intelligence, has made the observation,

> "The most surprising lesson we have learned from simulating complex physical systems on computers is that complex behavior need not have complex roots. Indeed,

> tremendously interesting and beguilingly complex behavior can emerge from collections of extremely simple components."[32]

One of the difficult issues that faces the church in every generation is "What does a Christian look like?" In other words, given the circumstances which are inherent in any given culture, what constitutes a legitimate Christian behavior given the particularity of Jesus. Each generation of Christians faces a new set of cultural criteria that becomes the backdrop of their spiritual lives. In the midst of this cultural milieu, a Christian is mandated to act in a particularly and peculiarly Christian manner, and that behavior is not always clearly defined. However, the scriptures do give us some important, fundamental rules for determining our behavior.

B. Relationship to the Scriptures

The Golden Rule (Matthew 7:12)

> "In everything do to others as you would have them do to you; for this is the law and the prophets.

The Greatest Commandment (Matthew 22:36-40)

> When the Pharisees heard that he had silenced the Sadducees, they gathered together, and one of them, a lawyer, asked him a question to test him. "Teacher, which

[32] Complexity, 279.

commandment in the law is the greatest?" He said to him, " 'You shall love the Lord your God with all your heart, and with all your soul, and with all your mind.' This is the greatest and first commandment. And a second is like it: 'You shall love your neighbor as yourself.' On these two commandments hang all the law and the prophets."

The Great Commission (Matthew 28:19-20)

Go therefore and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything that I have commanded you. And remember, I am with you always, to the end of the age."

C. Discussion Questions

What are the most important ministries of your church? Why are these important? How do they relate to the scriptures listed above? If the Golden Rule, The Greatest Commandment, and The Great Commission were the organizing principles of your church, what would need to change? If these were the organizing principles of your life, how would it change?

D. The concept of emergence tells us that there are a few basic activities that an organization must be about to be effective. For the church to effective in what it does, we must be a people of

prayer. The effectiveness of prayer is not in what we think about prayer, how we do it, or even what we pray. Prayer is only effective when we pray. ***Just do it!***

E. Where to Find More Information

1. Benson, Herbert. The Relaxation Response. New York: Wings Books, 1992.

2. Castelli, Jim, ed. How I Pray. New York: Ballantine Books, 1994.

3. The Cloud of Unknowing and Other Works. Translated by Clifton Wolters. Introduction by Clifton Wolters. New York: Penguin Books, 1978.

4. Dossey, Larry. Healing Words: The Power of Prayer and the Practice of Medicine. San Francisco: Harper San Francisco, 1993.

5. Hauerwas, Stanley and William H. Willimon. Resident Aliens. Nashville: Abingdon Press, 1989.

6. Nouwen, Henri J. M. Making All Things New: An Invitation to the Spiritual Life. New York: HarperCollins Publishers, 1981.

7. Warren, Rick. The Purpose Driven Church: Growth Without Compromising Your Message and Mission. Grand Rapids, Michigan: Zondervan Press, 1995.

8. Watson, David Lowes. The Early Methodist Class Meeting. Revised edition. Nashville: Discipleship Resources, 1989.

9. The Way of a Pilgrim. Translated by Olga Savin. Boston: Shambhala Publications, Inc., 1991.

F. Open Discussion

Explore any questions which have been left unexamined. Ask participants what more they would like to learn. Ask if anyone would like to consider further discussions on prayer or Christian spirituality. If appropriate, plan for another class.

G. Prayer

Ask for prayer concerns. Allow each participant the time to pray for individual concerns. Don't forget to thank God in prayer for each participant, the gifts that they have brought to the class, and the presence and guidance of the Holy Spirit through these sessions.

Summary of Evaluations

Observations

The response to the class was excellent. Participants felt that the information contained in the class was helpful to their own spirituality. Interest did not wane from class to class and the participation level was very even. Each participant felt able to share of the themselves and confident enough to ask questions and probe other participant's statements and answers. Best of all, the participants in the class (only one of whom had been a part of the focus group process) asked the same general questions brought out in the focus groups. One mother of a young family wanted to learn how to teach her children to pray. Others wanted to learn an outline for prayer. Others wanted to know what they should expect from prayer. Others wanted to know how to pray in public. Still others wanted to know want kind of benefits could be expected from prayer.

Replication of the Project

The replication of this project comes from the class outline itself. The simple approach of one concept per week, including examples from the scripture and relating the concept to everyday experience, worked well for the participants. I felt that I would like to have covered more. However, at several junctures the participants commented on the design of the class. Participants offered the opinion that this low pressure approach was

just what they needed in order to understand the concepts. Many were pleasantly surprised at how well these concepts of Chaos Theory related to Christian Spirituality. I feel that this approach would work well in other settings. I would feel comfortable teaching this class in any of the churches that I have served, including rural parishes. Everyone has a certain awe and wonder about the great themes of science as cosmology, and this class relates to those feelings in a very tangible way.

Significant Lessons in Ministry

At the beginning of this process, I had fairly well determined what my expectations were for the program, and what the response would be from the congregation. I had decided beforehand what my basic class outline would be, and how I would present that to the class. The biggest surprise, and ultimately the greatest lesson of the doctoral program, was what I learned from my context associates. They counseled me to be involved in fact finding before program development. I know that this sounds like a simple and straight forward concept. The reality is that I had already decided what needed to be learned, and how I was going to teach it. What I found out was that, had I continued on my original course, the class would have been a failure.

My doctoral group came together to explore the question of public trust in the mainstream denominations. I ever there was a prime example of how mainstream churches have lost the battle for mainstream America, this is it. I feel that mainline denominations really are attempting to address the spiritual quest presented by American

culture. However, are mainline denominations answering the questions that are being asked?

Another significant development in the midst of this particular class is that the participants wanted to continue with other classes along the same theme, namely, spirituality. Working on this impulse, I developed two more classes as well as one major and one minor presentation, all dealing with prayer and spirituality. There seems to be no end to the questions and discussion centered on these themes. In this particular context, people really are looking for spiritual answers to the dilemmas and traumas that they face in everyday life.

Finally, I have learned that I often assume too much of persons in terms of their spiritual development and their knowledge of Christian history and the Bible. Because of this, I sometimes have difficulty in communicating basic understandings of the faith. For example, I had originally intended to start the class process from the point of chaos theory, assuming quite a bit of background knowledge about prayer on behalf of the class participants. What I discovered in the focus groups was that I had to attack each class from two different points: tradition and "newfangled" theory. Otherwise, I would have been trying to use oil on a non-existing canvas, painting in the wind. Fortunately, the context associates saved me from this fundamental planning error. Jesus said the same thing, "...every scribe who has been trained for the kingdom of heaven is like the master of a household who brings out of his treasure what is new and what is old." [Mt. 13:52]

Epilogue

The outgrowth of this project in ministry was quite exciting and, in some ways, even more productive than the original exercise. Over the four months following the original class I was kept quite busy with spin-off ministries, all of which pertained to the traditional spirituality of the church. As persons who were involved with the class began to share with others what they had learned, others wanted to share in the same kind of learning experience. As these needs became apparent, I seized on them as an opportunity to follow the example of the twelve in their leadership of the early church: gather, teach and pray.

A Short Presentation: The Adventurers

The first opportunity came from the fifty-five and older group in the church, known as the "Adventurers." This group wanted a concise presentation on some helpful models of prayer. I prepared a short talk on prayer, and then led a discussion in which I tried to give some guidance to the participants own prayer lives. I used the following outline to guide the presentation.

The Adventurers
Church of the Saviour
January 11, 1995

Prayer

I. Not technique, but practice!
   A. The words and form of prayer are not as important as the fact that we actually get down to praying
   B. Just do it!

C. So let's begin our time together with prayer [an extemporaneous prayer]

II. How to Pray: Some Models and Types of Prayer

A. The Lord's Prayer

Our Father, who art in heaven,
hallowed by thy name.
Thy kingdom come,
thy will be done on earth as it is in heaven.
Give us this day our daily bread.
And forgive us our trespasses,
as we forgive those who trespass against us.
And lead us not into temptation,
but deliver us from evil.
For thine is the kingdom, and the power, and the glory, forever. Amen.

B. ACTS Method

Adoration
Praising God for who God is
Confession
Admitting to God and ourselves who we are
Thanksgiving
Gratitude for all of the gifts of God
Supplication
Praying for God's will

C. Prayer of Contemplation

1. The Lord's Prayer
2. The Psalms

D. Meditation (The repetition of a simple, meaningful prayer)

1. The Jesus Prayer
Lord Jesus Christ, Son of God, have mercy on me a sinner.
2. Psalm 23
The Lord is my Shepherd, I shall not want.

III. Resources

A. Scientific studies on the effects of prayer

Dossey, Larry. Healing Words. New York: HarperCollins Publishers,

Benson, Herbert. The Relaxation Response. New York: Wings Books, 1992.

B. Introduction to the Practice of Prayer

Foster, Richard J. Prayer: Finding the Heart's True Home. New York: HarperCollins Publishers, 1992.

Leech, Kenneth. True Prayer: An Invitation to Christian Spirituality. New York: HarperCollins Publishers, 1980.

C. Advanced Study

The Way of the Pilgrim. Translated by Olga Savin. Boston: Shambhala Publications, Inc., 1991.
The Cloud of Unknowing and Other Works. Translation and introduction by Clifton Wolters. New York: Penguin Books, 1978.

IV. Closing discussion, questions and prayer

A Prayer Seminar: The United Methodist Women

In February of 1995 I was asked to lead a seminar on prayer for a circle of the United Methodist Women. This circle was made up primarily of young mothers, some of whom work while others are full-time home makers. This seminar was particularly well received with about 40 persons in attendance. The following outline was used to lead the seminar.

United Methodist Women
Unit Meeting
February 28, 1995

Focus On Prayer

I. Why is Prayer such a frustrating topic?
   A. Quotable Quote
      "When it comes to prayer, the Church consists of two kinds of people: those who hate to pray but do, and those who hate to pray and don't." [Orteza, Arsenio, "Wasting Time: My Life as a Prayer Warrior," The Door (January/February 1995): 21.]
   B. Many of us are frustrated pray-ers.
      1. This is because we have unmet and unrealistic expectations in regard to prayer.
   C. Purpose of this morning's time together:
      1. Dispel some myths about prayer,
      2. Expand our concept of prayer, and
      3. Provide some tools for prayer.
II. Some popular expectations and ideas concerning prayer:
   A. Discussion questions
      1. In groups, share the following experiences
         a. What was
            1) The first prayer that you can remember,

2) The most meaningful prayer that you can remember, and

3) An answered prayer that you can remember?

a) Who was praying?

b) Where were you?

c) What were you doing?

d) Why do you remember it?

2. 3 Personal Stories
   a. Bill Holloway (My first prayer experience)
   b. The Hospital Chaplain (Meaningful Prayer)
   c. Stomach Pains (Answered Prayer)

B. Unrealistic expectations in relationship to prayer
   1. Example:
      a. Lea, Larry, Could You Not Tarry One Hour? :"Everyone should pray an hour every day." (Whew!)
   2. Images of prayer that loom large in the background
      a. Praying Hands and Callused Knees (posture)
      b. The "Prayer Warrior" whose heart physically moved out of compassion for others during prayer
      c. "Other-Worldly Saints"
      d. Lots of time alone in prayer
      e. Question: What would you add to this list?

C. We know that we *should* pray:
   1. We hear sermons about prayer.
   2. We see books about prayer.
      a. Cincinnati Library has 556 books on prayer covering 65 different topics.
   3. There are hundreds and hundreds of Scripture references concerning all kinds of communications between God and people in the form of:

a.	Supplication:	Prayer for help
b.	Intercession:	Prayer for others in need
c.	Praise/Blessings:	Remembering what God has done
d.	Dreams/Visions:	God reveals God's self and God's plan to humanity
e.	Meditation:	Deep thought on God's self-revelations
f.	Prayer:	The overall umbrella for any communication/communion with God and God's Holy Spirit

III. Let's dispel some of the self-doubt, anxiety, and self-recrimination associated with "not praying the right way" or "not praying enough."

A. What is Prayer?

1. Contact, connection, communion or conversation with God.

B. Why Pray?

1. "...to Reach outside of ourselves and touch, perhaps to move, a power greater than ourselves." [Castelli, Jim, ed., How I Pray (New York: Ballentine Books, 1994), ix.]

C. Henri Nouwen speaks some words of comfort to the busy and the bewildered:

> "Jesus does not respond to our... way of living by saying that we should not be so busy with worldly affairs. He does no try to pull us away from the many events, activities, and people that make up our lives. He does not tell us that what we do is unimportant, valueless, or useless. Nor does he suggest that we should withdraw from our involvements and live quiet, restful lives removed from the struggles of the world." [Nouwen, Henri J., Making All Things New: An Invitation to the Spiritual Life (San Francisco: Harper Collins, 1981), 41.]

D. Prayer can be a natural extension of our spirituality. Prayer can also fit into the ebb and flow of our daily lives, if we become intentional in our awareness of God's presence.

IV. Sometimes, all we really need is a way of praying that is helpful to us. Here are some **methods** that others have found useful.

A. ACTS Method

Adoration

Praising God for who God is

Confession

Admitting to God and ourselves who we are

Thanksgiving

Gratitude for all of the gifts of God

Supplication

Praying for God's will

B. 5 Points of Prayer Based on the Lord's Prayer. [Galloway, Dale E., 20/20 Vision: How to Create a Successful Church With Lay Pastors and Cell Groups. (Portland, Oregon: Scott Publishing Company, 1986) 62-70.]

1. PRAISE —THE TUNING-IN STEP

"Our Father which art in Heaven, hallowed be Your Name."

a. Who God is.

b. What God has done in scripture and in our lives. (James 1:17)

2. COOPERATION —CONNECTION STEP

"Your kingdom come, Your will be done on earth as it is in Heaven."

a. Pray for God's kingdom to come in your city, in your church and family —every part of your life.
b. Submit and fit into God's will and leadership in your life (Romans 12:1).

3. PETITION —THE RECEIVING STEP
"Give us this day our daily bread,"
a. Concerns (Philippians 4:4-7)
b. Intercession
c. Asking for wisdom
d. Praying for and receiving prosperity (III John 2)
e. Be specific. Detail in steps what you are asking for.

4. FORGIVENESS —THE HEALING STEP
"And forgive us our sins as we forgive those who sin against us."
a. Confession and cleansing (I John 1:9)
b. Forgiving and blessing those who have wronged you. (Hebrews 12:15; James 3)

5. VICTORY —THE CAN DO STEP
"Lead us not into temptation but deliver us from evil, for Thine is the kingdom, the power and the glory — forever."
a. Ask for and claim victory over temptation (James 4:7-8).
b. In Jesus' name claim deliverance and protection from Evil (I John 4:4).
c. Be glorified in my life.
d. Make positive affirmations (Philippians 4:13).

C. Sandra Goodwin Clopine is a former missionary and is the Coordinator for the National Prayer Center of the Assemblies of God in Springfield, Missouri. She offers the "ABC's of Prayer" [in How I Pray, edited by Jim Castelli.]

1. **A**dore God for who God is. In other words, worship God as God Almighty rather than coming to God with a big list of wants.
2. **B**elieve God for what God says. Have faith in God's word.
3. **C**onfess your need of all that God has to offer; commit your will to God's.

D. Want something a little more simple? Try these two:

1. The Lord's Prayer (All by itself —it has it all!)
Our Father, who art in heaven,
hallowed by thy name.

Thy kingdom come,
thy will be done on earth as it is in heaven.
Give us this day our daily bread.
And forgive us our trespasses,
as we forgive those who trespass against us.
And lead us not into temptation,
but deliver us from evil.
For thine is the kingdom, and the power, and the glory, forever. Amen.

2. The Jesus Prayer (An ancient prayer of the Church dating from the Middle Ages)
   a. Lord Jesus Christ, Son of God, have mercy on me a sinner.

E. Want something a little more personal? Try a Psalm on for size. Here are a couple that I like.
   1. Psalm 23 (NRSV)

The Lord is my shepherd, I shall not want.
He makes me lie down in green pastures;
he leads me beside still waters;
he restores my soul.
He leads me in right paths for his name's sake.

Even though I walk through the darkest valley,
I fear no evil; for you are with me;
your rod and your staff —they comfort me.

You prepare a table before me in the presence of my enemies;
you anoint my head with oil;
my cup overflows.
Surely goodness and mercy shall follow me all the days of my life,
and I shall dwell in the house of the Lord
my whole life long.

   2. Psalm 131 (NRSV)

O Lord, my heart is not lifted up,
my eyes are not raised too high;
I do not occupy myself with things too great
and too marvelous for me.
But I have calmed and quieted my soul,
like a weaned child with its mother;
my soul is like the weaned child that is with me.
O Israel, hope in the Lord from this time on and forevermore.

V. A Final Word: "The Five Habits of Highly Effective Pray-ers" [Jim Castelli, How I Pray, p. 187]

1. **Take a few minutes** early in the morning to clear your head, collect your thoughts, and set some goals and priorities for the day. If you exercise regularly, use it as a time to reflect as well.
2. **Use cues** throughout the day to remind yourself that there is another dimension to life beyond racing from chore to chore, from deadline to deadline, from crisis to crisis. Archbishop Weakland says he prays every time he opens the refrigerator door or a car door. Sometimes it takes just a few seconds to get back our perspective.
3. Take a few seconds to **reflect before any confrontation**, whether it's an important conversation or dealing with a work problem. Regrouping can help us say the right thing or —what's often more important —avoid saying the wrong thing.
4. **Do some reading** that helps you think about values, priorities, beliefs, and ways to live better. This may mean the Bible, or spiritual readings, or The One-Minute Manager; the important thing is to stimulate reflection.
5. **Make notes**. Jotting down a note or two can help you retain ideas, insights, and goals that come in a flash during reflection and then easily slip away.

VI. The Last Word, Really!

A. What is most important in the pursuit of an effective prayer life is not
When you pray
What *method* you use to pray
How you pray, or even,
What you pray.

B. What is important is that you do, indeed, PRAY!

C. Just DO It!

VII. Questions, Answers and Discussion and Prayer

A Class on Traditional Christianity from a Non-Traditional Perspective

By January of 1995, several persons had been engaging me in conversations about the then recently released Celestine Prophecy, by James Redfield. After a few inquiries, I decided that this book was something that I needed to be familiar with, so I read it. The

book itself deals with several themes of spirituality in the form of an entertaining novel. Redfield, a new age philosopher, explains nine different concepts of new age spirituality through the chapters of his book.

Two things struck me as significant in my reading as well as the conversations I was having with persons about this book. First, people were very interested in the spiritual dimensions of the book. In discussion after discussion, persons wanted to talk about the philosophy and spirituality presented in its pages. Second, Redfield was really presenting several traditional key concepts of the Christian faith without talking about God. Indeed, Redfield wants to divorce himself from traditional spirituality and present himself as a novel thinker. He insists that these are his ideas and that they are antithetical to Christian, Jewish, Moslem or Buddhist ways of thought. In fact, a primary foe of the hero is the organized church. However, this just is not so.

What I decided to do was to develop a discussion group around The Celestine Prophecy as use the novel as a platform for talking about traditional Christian spirituality as it related to the subject matter of the novel. As you might expect, idea of a church having a discussion group based on a popular new age novel was both controversial and refreshing. The class met nine times with anywhere from 17-26 participants, several of whom where from the surrounding community and had no involvement with a church. The perspectives of unchurched yet spiritually active persons were invigorating.

The following outline is a list of the concepts from Redfield's book as they relate to certain categories of Christian thought.

Redfield, James. The Celestine Prophecy: An Adventure. New York: Warner Books, 1993.

The Nine Insights

1. A Critical Mass

A new spiritual awakening is occurring in human culture, an awakening brought about by a critical mass of individuals who experience their lives as a spiritual unfolding, a journey in which we are led forward by mysterious coincidences.

Christian Concept: Providence.

God is actively involved with the affairs of humanity. Everything happens for a purpose and nothing escapes God's notice. John Wesley said that everything that happens is God's gift to us. How we react is our gift to God.

2. The Longer Now

This awakening represents the creation of a new, more complete worldview, which replaces a five-hundred-year-old preoccupation with secular survival and comfort. While this technological preoccupation was an important step, our awakening to life coincidences is opening us up to the real purpose of human life on this planet and the real nature of our universe.

Christian Concept: Heilsgeschichte

The history of humanity can be interpreted from the standpoint of the cross. The crucifixion becomes the focal point of history, interpreting everything that happened before and affecting everything that happened afterward.

3. A Matter of Energy

We now experience that we live not in a material universe, but in a universe of dynamic energy. Everything extant is a field of sacred energy that we can sense and intuit. Moreover, we humans can project our energy by focusing out attention in the desired direction ("where attention goes, energy flows"), influencing other energy systems and increasing the pace of coincidences in our lives.

Christian Concept: Spirit

Wholeness in life is experienced when the totality of existence is included in one's world view. To know only the material universe is to know only

a part of what is really going on in the world. Spirit, the animating force of life, gives power, direction, intuition, insight, and meaning to life. When one encounter's the spirit in a substantial way, one is transformed into a new life, a "new creation" which makes everything that has gone on before seem to pale in comparison.

4. The Struggle for Power

Too often humans cut themselves off from the greater source of this energy and so feel weak and insecure. To gain energy we tend to manipulate or force others to give us attention and thus energy. When we successfully dominate others in this way, we feel more powerful, but they are left weakened and often fight back. Competition for scarce human energy is the cause of all conflict between people.

Christian Concept: Servanthood

When we serve others, we empower ourselves. When we try to control others, when we manipulate others for our own gain, we lose everything. The greatest of all is the servant of all.

5. The Message of the Mystics

Insecurity and violence end when we experience an inner connection with divine energy within, a connection described by the mystics of all traditions. A sense of lightness--buoyancy--and the constant sensation of love are measures of this connection. If these measures are present, the connection is real. If not, it is only pretended.

Christian Concept: Agape

The Christian mystics maintained that the spiritual life was an intimate connection with the divine. Each of us contains a spark of the divine, but we must cultivate it. John Wesley taught that Christian perfection was the will to love others at all time. John writes that God is love. Those that follow God will love others as God first loved them. Agape love is a modeling of God's unconditional love towards humanity.

6. Clearing the Past

The more we stay connected, the more we are acutely aware of those times when we lose connection, usually when we are under stress. In these times, we can see our own particular way of stealing energy from others. Once our manipulations are brought to personal awareness, our connection becomes more constant and then we can discover our own growth path in

life, and our spiritual mission, the personal way we can contribute to the world.

Christian Concept: Metanoia

The life of the spirit is a life of recognizing where we stray from God's love and fall into habits harmful to ourselves and others. Metanoia is turning from negative and harmful actions to positive and helpful actions. When we grow in this life of the spirit, our place in the world becomes more apparent. Paul said that each Christian is given a specific function within the church just as the human body has many parts, each with their own function. However, unless we are connected to the spirit, we will be frustrated in our pursuit of vocational fulfillment.

7. Engaging the Flow

Knowing our personal mission further enhances the flow of mysterious coincidences as we are guided toward our destinies. First we have a question, then dreams, day-dreams, and intuitions lead us toward the answers, which usually are synchronistically provided by the wisdom of another human being.

Christian Concept: God speaks to those who will listen

God has spoken to many persons throughout the ages through many different mediums, including providence (coincidences), intuitions, dreams, trances, out of body experiences, meditation and prayer, to name a few. We must be open to these many avenues of communication if we are to truly hear God's word to us.

8. The Interpersonal Ethic

We can increase the frequency of guiding coincidences by uplifting every person that comes into our lives. Care must be taken not to lose our inner connection in romantic relationships. Uplifting others is especially effective in groups where each member can feel the energy of all the others. With children it is extremely important to their early security and growth. By seeing the beauty in every face we lift others into their wisest self and increase the chances of hearing a synchronistic message.

Christian Concept: The Golden Rule

When we truly treat others the way that we wish to be treated, we lift them to a level higher than ourselves. In the lifting up of others we elevate our own position, becoming empowered by the spirit and animated by love.

Jesus also reminds us to let the children know the demonstrations of God's love as well as others we consider our equals. All persons are worthy of God's love, whether young or old, male or female, rich or poor, advantaged or disadvantaged.

9. The Emerging Culture

As we all evolve toward the best completion of our spiritual missions, the technological means of survival will be fully automated as humans focus instead on synchronistic growth. Such growth will move humans into ever-higher energy states, ultimately transforming our bodies into spiritual form and uniting this dimension of existence with the afterlife dimension, ending the cycle of birth and death.

Christian Concept: The New Creation

Paul said that we shall not all die, but we shall all be transformed. Imperishable will replace perishable, immortality will replace mortality. Death will be swallowed up in victory. Grief and death will come to an end in an idyllic age in which everyone will be provided with the means for survival so that all would be free to worship God and live out the law of love toward one another.

The Church in the Twenty-First Century

In April, I was asked to give a seminary on the church and what it might look like in the coming years. This seminar gave me the opportunity to speak directly to the concept of emergence as it relates to the basic functions of the church and what the church structure might look like as a result. I used observations from several different areas of research, and also supplied each participant with a list of further study resources. The following outline was used to lead this seminar.

The Church in the 21st Century
April 19, 1995

I. The fundamental question for the church in any age and any culture:
"How do we relate the gospel of Jesus to our generation?"

A. What is the gospel?
   1. The gospel is the good news that through Jesus, God has reconciled God's self with creation. Since we have a fresh, loving and nurturing relationship with God, we can also have loving relationships with others. The Kingdom of God has arrived!

II. Examples of Cultural Transitions in Church History
   A. Ancient Church
      1. Jewish Sect to Gentile Religion (40 - 70 AD)
   B. Holy Roman Empire
      1. Underground Movement to Dominant Institution (270 - 325 AD)
         a. 312 AD Last of the "Great" persecutions
         b. 313 AD Edict of Milan
         c. 325 AD Council of Nicea
   C. Reformation (16th century AD)
      1. Non-Participatory to Participatory
         a. Two class system
            1) Clergy
            2) Lay
         b. Universal Priesthood of all believers
            1) Sacraments
            2) Bible reading and discussion
            3) Married priests
   D. Methodist Movement (18th century AD)
      1. Non-Relational to Relational
         a. Holy Clubs, Bands, Societies
         b. Organized hospitals, schools, and orphanages
         c. Cared for widows, the elderly and infirm

III. Today, we are at another crossroads
   A. Irrelevance to Relevance
      1. Public policy has replaced traditional church pursuits
      2. People are interested in a spiritual adventure rather than church attendance
      3. Hands on mission opportunities
      4. Vibrant Worship
         a. Realist Mode
            1) More ritual and prescribed liturgies
         b. Abstract Mode
            2) More spontaneity and free-form liturgies

IV. Questions and Discussion
   A. What do you think of the "health" of the church? What is the church doing right? What is the church doing wrong?
   B. How can the church better related to persons? How do we get unchurched persons interested in Jesus?

C. What are some of the activities and functions of the church that are meaningful to you? What keeps you connected to the church? What could the church be doing that it is not currently doing that would be helpful to you in your spiritual growth?

V. A Reading Resource List

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Conclusion

In my experience, the original model of ministry became a starting point for some other very significant ministries and leadership opportunities in the local church. As chaos spirituality predicted, the object is not controlled experimentation in ministry, but

rather, being open to the leadership and guidance of the Holy Spirit. When one is open to these ever changing and sometimes surprising winds, one can have a tremendous impact on the general context of ministry.

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Introduction

There are two large categories from which I gleaned my research. The first is Christian spirituality and prayer, which is extremely great in its scope. The second is the literature pertaining to Chaos Theory.

Surprisingly enough, there is a substantial amount of material available concerning the connection between Chaos Theory and Theology. This includes several works by John Polkinghorne. However, there is a conspicuous absence of material relating this theological connection to personal piety or "practical" spirituality. This is the void that I hope to address with my own research project.

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Appendix: Evaluation Questionnaire and Responses

Prayer Class Questionnaire

After the class was completed, I sent the following questions to the class participants.

What is your age? _____

What is your sex? male _____ female _____

What is your marital status?

Never-married _____
Divorced _____
Widow(er) _____
Married _____

What is your educational background? (Please indicate the level of study you have completed.)

Elementary _____
High School _____
Associate Degree _____
College Degree _____
Post-graduate _____

Please indicate the number of classes you attended.

1 _____
2 _____
3 _____
4 _____

The following questions deal with your impressions of the prayer class. For the most part, the questions deal with your feelings about the class. There are no right or wrong answers. Please be as honest as you can.

Please rate the importance of each part of the class.

Least Important	Not Very Important	Neutral	Somewhat Important	Very Important

1. Instructor

2. Scripture References

3. Model Prayers

4. Class discussion

5. Terms borrowed from
   Chaos Theory

6. Class assignments

7. Time of the class
   (Wednesday evenings)

8. Length of class
   (45 minutes)

The following questions give you the opportunity to say whatever you would like to say about the class. Remember, be as honest as possible in your answers. They will be helpful in designing future opportunities for study and reflection.

What did you like the most about the class?

What did you dislike about the class?

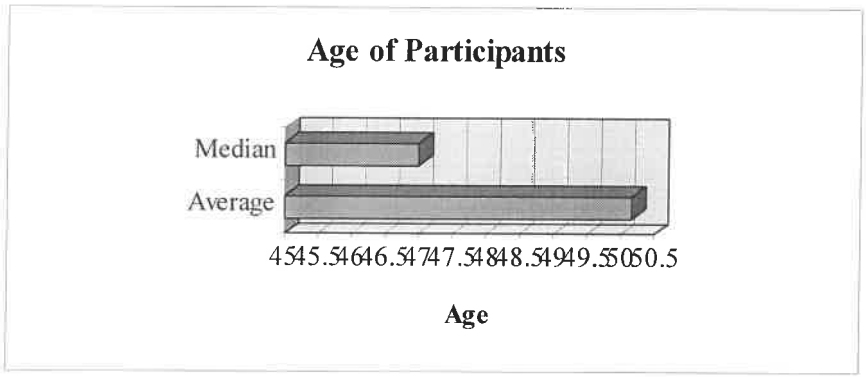
If you could change this class, what would you do differently?

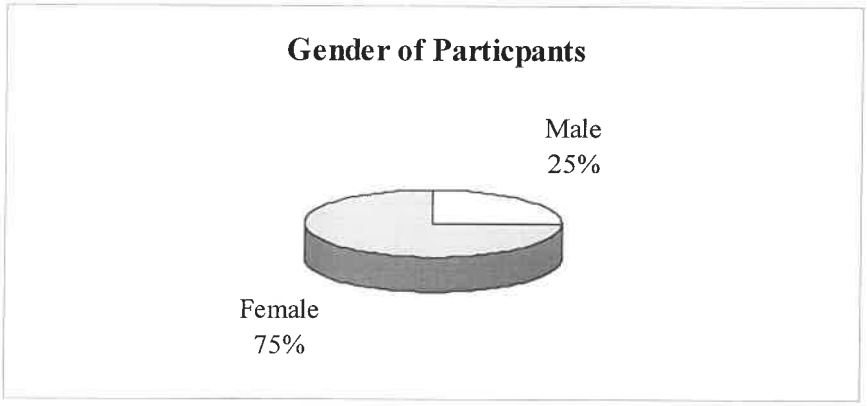
Would you recommend this class to a friend? Why?

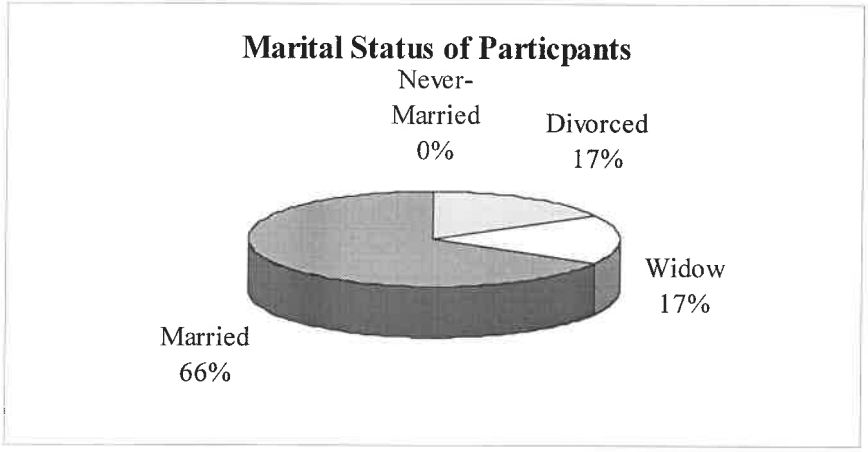
What other topics would you like to see offered at Church of the Saviour?

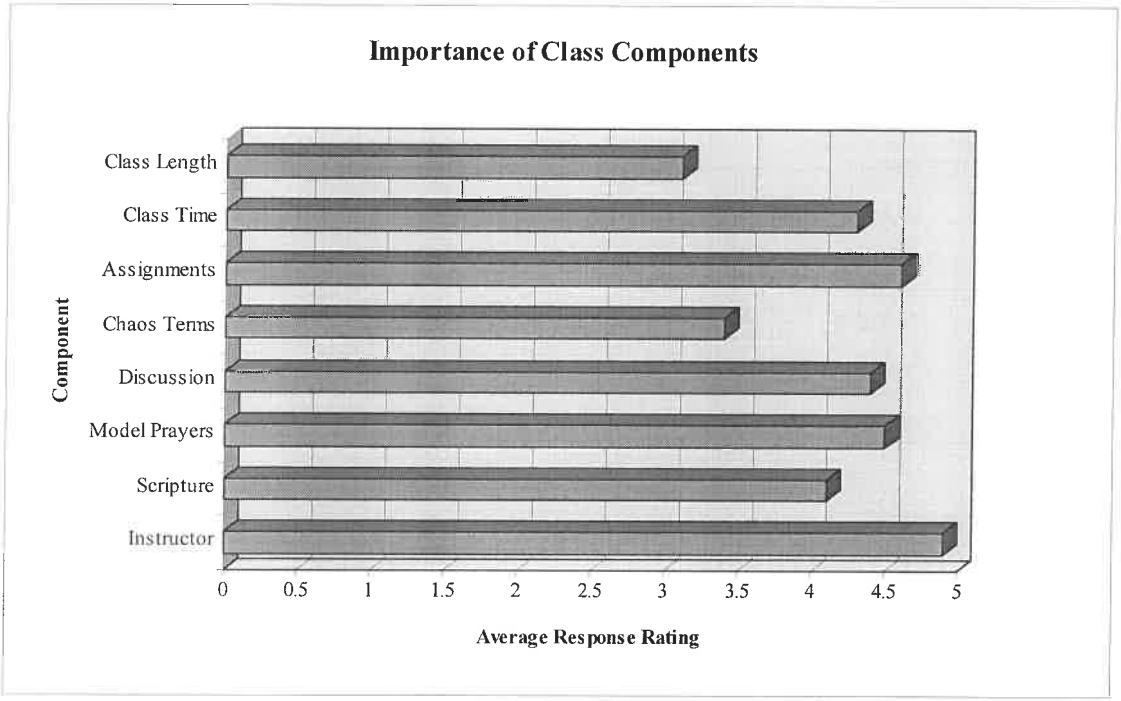
Responses to the Questionnaire

Demographic Information


Age of Participants
Median
Average
45
45.5
46
46.5
47
47.5
48
48.5
49
49.5
50
50.5
Age


Gender of Particpants
Male
25%
Female
75%


Marital Status of Particpants
Never-
Married
0%
Divorced
17%
Widow
17%
Married
66%



What did you like the most about the class?

#1. Relaxed atmosphere. You have a wonderful style that helps the group open up and talk.

#2. Beneficial to me was the presentations of several alternatives of prayer. From these, I was able to discover which method worked best for me. I just liked the idea of having a class on prayer to see how others accomplish and incorporate prayer in their lives.

#3. Your presentation of the topics was well-organized and interestingly presented.

#4. The meeting I attended was very interesting and informative. (Not attending others due to previous commitment.)

#5. Referring directly or indirectly to meditation.

#6. Being in a group of fellow Christians, sharing ideas about prayer.

#7. Contents meaningful and helpful. Printed sheets to keep.

#8. The discussions.

#9. Discussion. Asking questions.

#10. Instructor's enthusiasm; listening to others' ideas.

#11. The fact we were having the class. Knowledgeable instructor/leader.

#12. It helped me to focus on the importance of prayer and meditation.

What did you dislike about the class?

#1. Too short - both the 45 minutes and the limited sessions. So much to learn on prayer!

#2. I didn't like the room it was held in. It was too cold and impersonal.

#3. [NONE]

#4. [NONE]

#5. [NONE]

#6. Hesitancy of participants to speak.

#7. Not enough time for enough discussion.

#8. The time was a little difficult but that wasn't that difficult.

#9. Time of class.

#10. Seemed rushed.

#11. [None.]

#12. Too short, although with two small children it was just right.

If you could change this class, what would you do differently?

#1. Occasionally some members seemed to dominate the discussion - even take us off track somewhat. This wouldn't be so bad if the time weren't limited.

#2. Have sub-groups within the class (groups of 3-5) to discuss personal prayer with each other. With the short time of each class and the size of the class, there is not enough opportunity for all to participate.

#3. [NONE]

#4. [NONE]

#5. Longer to allow for more discussion.

#6. Perhaps smaller - sub group break downs would draw out more discussion/participation by "quiet" members.

#7. Lengthen class time - should have had at least 60 minutes.

#8. Maybe make it longer with a little more reading.

#9. Have more time.

#10. More than four sessions.

#11. Try for more discussion. More Biblical background.

#12. [None.]

Would you recommend this class to a friend? Why?

#1. Absolutely! I would even consider taking the same class again. So much to learn and apply!

#2. Yes. I have come away from the class and the following book study you did (Making All Things New, Henri Nouwen) with the realization of the importance of prayer.

#3. Yes. Good information well presented. A good balance of discussion and leadership.

#4. [NONE]

#5. [NONE]

#6. Yes, if I felt they were a "prayerful" type of person.

#7. Yes - meaningful.

#8. Yes. I thought it was a great way to examine prayer styles and develop one of my own.

#9. Yes. It was very meaningful to me.

#10. Yes, I enjoyed it.

#11. Yes-informational; helps build faith.

#12. Yes. Prayer and meditation are important.

What other topics would you lie to see offered at Church of the Saviour?

#1. More on prayer and devotional life. Book studies regarding forgiveness, grace and spiritual living in today's world.

#2. Study of other denominations - differences and similarities.
How do we share our faith with people outside the church?
Such as spreading God's word without alienating others.
Daily exercising one's faith.
How about having a "craft-making" session, or an "How-to" class to bring in others who like to do that kind of thing. Bring more activities to the church on Wednesdays.

#3. [NONE]

#4. I could use a review of the Old and New Testaments as I have forgotten some of the studies I had earlier.

#5. Would like this class repeated (once or twice a year?)

#6. Basic Bible study. The specific teachings of Christ and discussion. Christian perspectives on current events.

#7. Christian meditation.

#8. Studies about the books discussed in the class.

#9. Actual Bible study.

#10. Adult Sunday School; general parenting classes.

#11. Bible Studies.

#12. [None.]

Additional Comments

#1. [NONE]

#2. [NONE]

#3. [NONE]

#4. [NONE]

#5. [NONE]

#6. [NONE]

#7. [NONE]

#8. [NONE]

#9. [NONE]

#10. [NONE]

#11. [NONE]

#12. [NONE]